

CLAIMS

What is claimed is:

- 5    1. A system for communication, comprising:  
      a set of one or more rich media environments  
      having a corresponding arrangement of sensing and  
      rendering components;  
      interest thread detector that uses the sensing  
10    and rendering components to detect multiple  
      communication interactions among a set of individuals  
      and that maintains an interest thread for each  
      communication interaction;
- 15    communication provider that for each interest  
      thread captures a set of media data from the sensing  
      components and that combines the captured media data  
      in response to the activities of the individuals and  
      that communicates the combined media data to the  
      rendering components.
- 20    2. The system of claim 1, wherein the communication  
      provider selects a subset of the sensing and  
      rendering components for use for each interest  
      thread.
- 25    3. The system of claim 1, wherein the activities  
      include speech levels of the individuals.
- 30    4. The system of claim 1, wherein the activities  
      include gestures by the individuals.
5. The system of claim 1, wherein the activities  
      include movements by the individuals.

6. The system of claim 1, wherein the activities include locations the individuals.

5 7. The system of claim 1, wherein the communication provider refines the media data obtained from the sensor components in response to the activities.

10 8. The system of claim 1, wherein the communication provider stores the combined media data to provide a history of the corresponding communication interaction.

15 9. The system of claim 1, wherein one or more of the communication interactions pertain to an artifact in one of the rich media environments.

10. The system of claim 9, wherein the artifact changes over time.

20 11. The system of claim 9, wherein the artifact is a shared virtual writing surface.

12. The system of claim 10, wherein a change to the artifact is made by one of the individuals.

25 13. The system of claim 10, wherein the communication provider records a history of the artifact over time.

30 14. The system of claim 1, wherein the interest thread detector detects one or more activities in the rich media environments and creates an interest area

for each detected activity.

15. The system of claim 14, wherein the interest  
thread detector associates the interest areas with  
5 the interest threads.

16. The system of claim 1, wherein one or more of  
the communication interactions is among two or more  
of the individuals in one of the rich media  
10 environments.

17. The system of claim 1, wherein one or more of  
the communication interactions is among one or more  
of the individuals in two or more of the rich media  
15 environments.

18. The system of claim 1, wherein the interest  
thread detector detects formation of a particular  
communication interaction by detecting a movement of  
20 one of the individuals.

19. The system of claim 18, wherein the movement  
pertains to one of the rendering devices.

25 20. The system of claim 18, wherein the movement  
pertains to one of the other individuals.

21. The system of claim 1, wherein one or more of  
individuals is in a remote location and in possession  
30 of a remote sensing and rendering component.

22. A method for communication using a set of rich  
media environments each having a corresponding

arrangement of sensing and rendering components,  
comprising the steps of:

detecting multiple communication interactions  
among a set of individuals;

5 maintaining an interest thread for each detected  
communication interaction;

capturing a set of media data from the sensing  
components;

10 combining the captured media data in response to  
the activities of the individuals;

communicating the combined media data to the  
rendering components.

23. The method of claim 22, further comprising the  
15 step of selecting a subset of the sensing and  
rendering components for use for each interest  
thread.

24. The method of claim 44, wherein the step of  
20 combining the captured media data in response to the  
activities of the individuals includes the step of  
detecting speech levels of the individuals.

25. The method of claim 22, wherein the step of  
combining the captured media data in response to the  
activities of the individuals includes the step of  
detecting gestures by the individuals.

26. The method of claim 22, wherein the step of  
30 combining the captured media data in response to the  
activities of the individuals includes the step of  
detecting movements by the individuals.

27. The method of claim 22, wherein the step of combining the captured media data in response to the activities of the individuals includes the step of detecting locations of the individuals.

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28. The method of claim 22, further comprising the step of refining the media data obtained from the sensor components in response to the activities.

10 29. The method of claim 22, further comprising the step of storing the combined media data in a history of the corresponding communication interaction.

15 30. The method of claim 22, further comprising the step of monitoring an artifact over time.

31. The method of claim 30, further comprising the step of recording a history of the artifact over time.

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32. The method of claim 22, further comprising the steps of detecting one or more activities in the rich media environments and creating an interest area for each detected activity.

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33. The method of claim 32, further comprising the step of associating the interest areas with the interest threads.

30 34. A computer-readable storage media that contains a set of code that when executed provides communication among a set of rich media environments each having a corresponding arrangement of sensing

and rendering components by performing the steps of:  
detecting multiple communication interactions  
among a set of individuals;  
maintaining an interest thread for each detected  
5 communication interaction;  
capturing a set of media data from the sensing  
components;  
combining the captured media data in response to  
the activities of the individuals;  
10 communicating the combined media data to the  
rendering components.

35. The computer-readable storage media of claim 34,  
further comprising the step of selecting a subset of  
15 the sensing and rendering components for use for each  
interest thread.

36. The computer-readable storage media of claim 34,  
wherein the step of combining the captured media data  
20 in response to the activities of the individuals  
includes the step of detecting speech levels of the  
individuals.

37. The computer-readable storage media of claim 34,  
25 wherein the step of combining the captured media data  
in response to the activities of the individuals  
includes the step of detecting gestures by the  
individuals.

30 38. The computer-readable storage media of claim 34,  
wherein the step of combining the captured media data  
in response to the activities of the individuals  
includes the step of detecting movements by the

individuals.

39. The computer-readable storage media of claim 34,  
wherein the step of combining the captured media data  
5 in response to the activities of the individuals  
includes the step of detecting locations of the  
individuals.

40. The computer-readable storage media of claim 34,  
10 further comprising the step of refining the media  
data obtained from the sensor components in response  
to the activities.

41. The computer-readable storage media of claim 34,  
15 further comprising the step of storing the combined  
media data in a history of the corresponding  
communication interaction.

42. The computer-readable storage media of claim 34,  
20 further comprising the step of monitoring an artifact  
over time.

43. The computer-readable storage media of claim 42,  
further comprising the step of recording a history of  
25 the artifact over time.

44. The computer-readable storage media of claim 34,  
further comprising the steps of detecting one or more  
activities in the rich media environments and  
30 creating an interest area for each detected activity.

45. The computer-readable storage media of claim 44,  
further comprising the step of associating the

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interest areas with the interest threads.

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